## ABSTRACT OF THE DISCLOSURE

A shock absorber (2) with a piston rod (12) accommodated in an outside housing (14) so as to be slidable in its longitudinal direction especially shall be well suited for a robust and reliable detection of the position of its piston rod (12) in relation to the outside housing (14) using simple means. To this end, the piston rod (12) is equipped with a magnetic encoder (18) comprising a permanent-magnetic material with a modulated field line progression and/or modulated magnetic field strength extending in the longitudinal direction.